

WHAT IS CLAIMED IS:

1 1. A method for fabricating an electro-optical sensor, said method
2 comprising:

3 providing a glass substrate comprising an optically smooth top surface and an
4 optically smooth bottom surface;

5 coating the top surfaces of the glass substrate with a transparent electrode;

6 applying a composition of electro-optic sensor material as a layer over the
7 transparent electrode;

8 applying a thin layer of adhesive over the layer of the electro-optic sensor
9 material layer; and

10 laminating a pellicle as a film bearing a dielectric mirror layer to the adhesive
11 layer such that the dielectric mirror layer is substantially optically smooth against the electro-
12 optic sensor material.

1 2. The method in claim 1, wherein said electro-optic sensor material is a
2 polymer dispersed liquid crystal (PDLC).

1 3. The method according to claim 1 wherein the laminating step
2 comprises performing the lamination in a vacuum.

1 4. The method according to claim 3 wherein the vacuum is less than 0.8
2 atmosphere.

1 5. The method according to claim 3 wherein the vacuum is between one-
2 half atmosphere and 0.8 atmosphere.

1 6. The method according to claim 3 wherein the pellicle progressively
2 engages the adhesive layer during the laminating step, the pellicle and the adhesive layer
3 being disposed at an angle relative to one another.

1 7. The method according to claim 1 wherein the pellicle progressively
2 engages the adhesive layer during the laminating step, the pellicle and the adhesive layer
3 being disposed at an angle relative to one another.

4 8. The method according to claim 7 wherein the vacuum is between one-
5 half atmosphere and 0.8 atmosphere.